



**FLEXIBLE-SHAFT GRINDER**  
**MODEL G1806**  
**INSTRUCTION MANUAL**



**GRIZZLY IMPORTS, INC.**

COPYRIGHT ©1992 BY GRIZZLY IMPORTS, INC.  
**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY  
SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY IMPORTS, INC.**  
PRINTED IN USA, MAY 1992

# TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. COMMENTARY .....	1
III. SAFETY RULES FOR ALL TOOLS .....	2
IV. ELECTRICAL SERVICE REQUIREMENTS .....	4
V. OPERATIONS .....	5
VI. MAINTENANCE .....	5
VII. CLOSURE .....	6
VIII. PARTS LIST AND DIAGRAM .....	7
IX. MACHINE DATA .....	8
X. WARRANTY AND RETURNS .....	9
NOTES .....	10

COPYRIGHT ©1992 BY GRIZZLY IMPORTS, INC.

**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY  
SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY IMPORTS, INC.**

PRINTED IN USA, MAY 1992

# I. INTRODUCTION

We are proud to bring you to the Model G1806 Flexible-Shaft Grinder. The Model G1806 is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The Model G1806 comes complete with  $\frac{5}{32}$ " drill chuck, foot pedal control, swing-away arm, cord set, and  $\frac{1}{4}$  HP motor. This versatile tool can be used for carving, drilling, buffing, engraving and a wide variety of other applications. Its variable-speed control foot pedal and high-end torque range are enjoyed by professionals and hobbyists alike.

We are also pleased to provide this instruction manual with the Model G1806. This instruction manual was written to guide you through assembly, review safety considerations and cover general operating procedures. It represents our latest effort to produce the best documentation possible. If you have any constructive criticisms or comments that you feel we should include in our next printing, please write to us at the address below.

Manager, Technical Documentation  
Grizzly Imports, Inc.  
P.O. Box 2069  
Bellingham, WA 98227-2069

Finally, we stand behind our machines. We have two excellent regional service departments at your disposal should the need arise. If you have any service questions or parts requests, please call or write to us at the appropriate location listed below.

If you live West of the  
Mississippi River, contact:  
P.O. Box 2069  
Bellingham, WA 98227  
Phone (206) 647-0801

If you live East of the  
Mississippi River, contact:  
2406 Reach Road  
Williamsport, PA 17701  
Phone (717) 326-3806

# II. COMMENTARY

As with any tool or machine, a thorough understanding of how this Jointer operates is necessary for safe operation. Please take the time to read this manual thoroughly. If you do not understand something, **DO NOT** operate this machine. Contact us first for assistance or advice. Grizzly cautions that although our Safety Rules are extensive, they aren't necessarily comprehensive. The bottom line on safety is this: Make sure a setup or operation is safe *as it applies to your situation*. What's safe in one shop might be dangerous in another.

We would also like to state that the specifications, drawings and photographs in this manual represent the Model G1806 as supplied when this manual was prepared. We are meticulous with our manuals; however, product changes or discrepancies can occur. Whenever possible, we send manual updates to all owners of a particular tool or machine. Should you receive one, please insert the new information with the old and keep it for reference.

We recommend that you keep a copy of our current catalog for complete information regarding Grizzly warranty and return policy. Should you need additional technical information relating to this machine, parts, or general assistance, please contact the appropriate regional service department.

We also believe additional information sources are very important to better realize the full potential of this machine. Trade journals, woodworking magazines or your local library are excellent places to start.

Again, thanks for choosing Grizzly.

### III. SAFETY RULES FOR ALL TOOLS

There is a certain amount of danger associated with the use of this tool. Operating it with respect and caution will considerably lessen the possibility of personal injury. If these safety precautions are ignored, injury to the operator or others in the area could occur.

The Model G1806 should never be modified or used for any other purpose than that for which it was intended. As well as being dangerous, modifications or improper use of the Model G1806 will void all warranties.

1. **KNOW YOUR MACHINE.** Read the owner's manual carefully. Learn the machine's capabilities and limitations as well as the potential hazards associated with it.
2. **KEEP ALL GUARDS IN PLACE** and in working order.
3. **GROUND ALL NON-INSULATED TOOLS.** If the machine has a three-prong plug, it should be plugged into a grounded three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground. Never remove the grounding prong from the plug.
4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Develop the habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
6. **AVOID DANGEROUS ENVIRONMENTS.** Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
7. **MAINTAIN A SHOP "SAFE ZONE".** Keep all visitors a safe distance from the work area.
8. **MAKE WORKSHOP CHILD-PROOF.** Use padlocks, lockable master switches, or remove starter keys.
9. **DO NOT FORCE MATERIAL INTO THE MACHINE.** It will do the job better and safer at the rate for which it was designed.

10. **USE THE RIGHT TOOL.** Do not use a tool or attachment to do a job that it was not designed to do.
11. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties or jewelry that may get caught in moving parts. Non-slip footwear is also recommended. Wear a hat or hair covering to contain long hair.
12. **USE SAFETY GLASSES AND EAR PROTECTION.** Also, use a dust mask or respirator if an operation produces dust.
13. **SECURE WORK.** Use clamps or a fixture to hold work piece. It is safer than using your hand and frees both hands to operate the tool.
14. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN MACHINE IN TOP CONDITION.** Keep cutting edges sharp and clean for safest, most accurate performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT MACHINE** from power source and wait for all moving parts to stop before inspecting, servicing and before changing accessories.
17. **USE RECOMMENDED ACCESSORIES.** Refer to the current catalog for recommended accessories. The use of improper accessories may be hazardous.
18. **AVOID ACCIDENTAL STARTING.** Make sure switch is in the "OFF" position before plugging in power cord.
19. **NEVER STAND OR LEAN ON MACHINE.** Serious injury could occur if the machine is tipped or if the cutting edge is accidentally touched.
20. **INSPECT MACHINE BEFORE EACH USE.** Before each use of the machine, any part that is damaged should be repaired or replaced. Check for proper alignment, binding, mounting, and any other conditions that may affect machine operation. Perform maintenance service promptly when called for.
21. **DIRECTION OF FEED.** Always feed work into a blade or cutter *against* the direction of rotation of the blade or cutterhead.
22. **NEVER LEAVE MACHINE RUNNING UNATTENDED — TURN POWER OFF.** Do not leave machine until it comes to a complete stop.
23. **DO NOT OPERATE MACHINE WHILE UNDER THE INFLUENCE** of drugs, or any medication that will affect your competence or judgement.
24. **DO NOT WORK IN HASTE** or operate machine if you are mentally or physically fatigued.
25. **IF THERE IS SOMETHING YOU DO NOT KNOW OR UNDERSTAND, DO NOT OPERATE MACHINE!** Ask for help first. Confusion can be dangerous.
26. **BAD HABITS ARE DANGEROUS.** Periodically review all safety procedures.

## IV. ELECTRICAL SERVICE REQUIREMENTS

### A. GENERAL INFORMATION

Your Model G1806 Flexible-Shaft Grinder must be connected to a 110/120V circuit. Make sure that the plug matches the outlet you intend to use. Also ensure that the outlet and plug type selected are suitable for use as an equipment grounding method—not all kinds are.

### B. GROUNDING

**This equipment must be grounded.** This Jointer is supplied with a power cord with ground wire. Please ensure that the saw is continuously grounded from the motor to the machine frame and then to a known ground. Verify that any existing 110/120V volt outlet you intend to use is actually grounded. If it is not, it will be necessary to run a separate 15 AWG copper grounding wire from the outlet to a known ground. If adding a new circuit, please ensure that the circuit is grounded to the grounding terminal in your electric service panel.

**Fusing:** Fuse at 15 amps. Fuses rated any higher will not adequately protect this motor. Grizzly warns that equipment returned to us showing evidence of being improperly fused will be repaired or replaced totally at the customer's expense, *regardless of the present warranty status.*

**Extension Cords:** If used, extension cords must be rated hard service (grade S) or better. Conductor size must be 15 AWG for cords up to 50 feet in length. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

### C. WORD OF CAUTION

**NEVER** remove the grounding pin from any plug. Should you choose to replace the plug and use another style, make sure the type selected is suitable for use as an equipment grounding method.

In this section, we have recommended basic electrical service requirements for your Model G1806. As with the safety rules in the preceding section, these requirements are not necessarily comprehensive. Further, you must be sure that your particular electrical configuration complies with local and state codes. The best ways to ensure compliance are to check with your local municipality or licensed electrician.

## V. OPERATION

### A. TEST RUN

1. Wear safety glasses or other eye/face protection.
2. Ensure outlet is properly grounded. (See previous section.)
3. Mount tool holder in suitable work area.
4. *Without a bit in the chuck*, plug the grinder in and turn power on.
5. Gripping the grinder like a pen, apply light pressure to the foot pedal. The increase in speed should be slow and steady. Spend a few minutes like this just to get the "feel" of the grinder before beginning a project.

### B. PROCEDURES

Before you start a project, we recommend testing your skill on scraps until you're accustomed to the movement of the grinder.

- Use multiple passes when removing large amounts of material.
- For intricate work, hold the chuck like a pen; for heavier work, hold the chuck like a hammer.
- Do not bend the flexible shaft more than 90°.
- Different materials require different operating speeds; e.g. wood and metal would require higher speeds, while plastics would benefit from slower speeds.
- Make sure bits are sharp.
- Remember to turn the power off and hang the motor out of the way before leaving your work area.

## VI. MAINTENANCE

The motor and chuck assembly run on shielded, permanently lubricated ball bearings and require no further lubrication. The only maintenance that might be necessary is the changing of the motor brushes. This is outlined below.

1. Unplug the grinder and unscrew the two plastic caps that hold the brushes in place against the commutator.
2. Remove the old brushes if they are worn or damaged. Make sure they touch the commutator.
3. Run the grinder under no load to ensure proper seating of the brushes.

## **VII. CLOSURE**

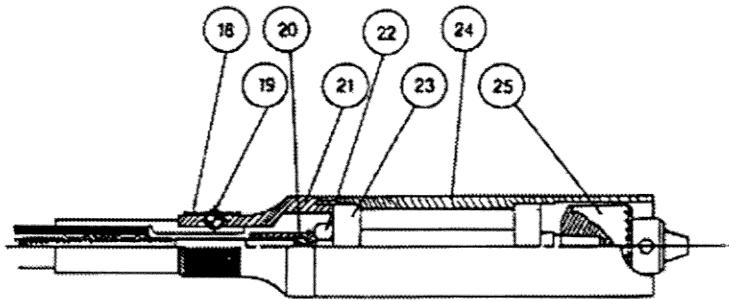
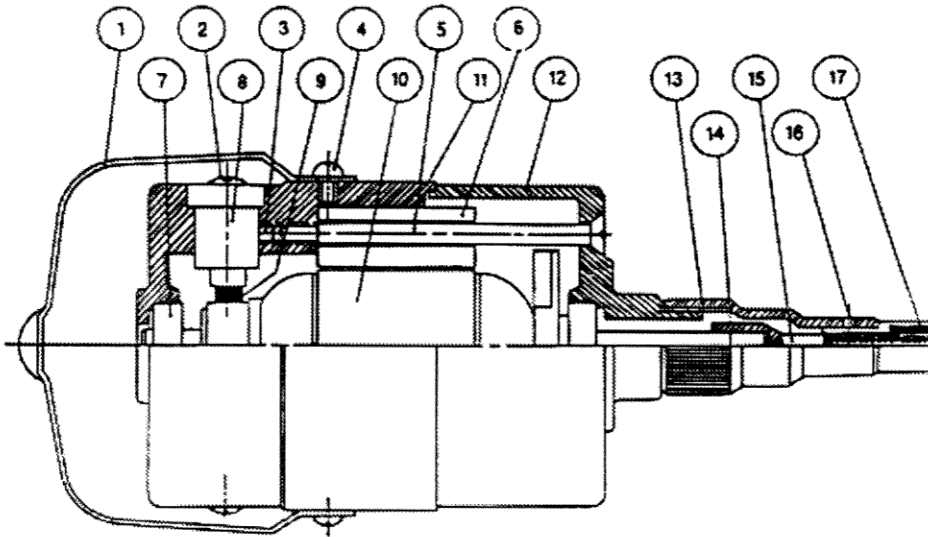
The following pages contain general specifications, a parts diagram, a parts directory and warranty and return information for your Model G1806 Flexible Shaft Grinder.

You are welcomed and encouraged to write or call the appropriate regional service department if you need parts or service assistance. Our service staff will be glad to help you. If you wish to comment on this manual, please write to our Bellingham, Washington location.

Again, thank you for your purchase. We sincerely appreciate your business and hope we have the opportunity to serve you again soon.



## VIII. PARTS LIST AND DIAGRAM



01	P1806001	Hanger
02	P1806002	Brush Holder Cap
03	PSS07M	M5 x .8 x 5 Setscrew
04	P1806004	Hanger Bolt
05	PB11M	M5 x .7 x 8 Bolt
06	P1806006	Stator Set
07	P608ZZ	Ball Bearing
08	P1806008	Brush Holder
09	P1806009	Brush
10	P1806010	Armature
11	P1806011	Motor Housing
12	P1806012	Front Cover
13	P1806013	Special Nut
14	PSS08M	M4 x .7 x 5 Setscrew
15	P1806015	Flexible Shaft

16	PSS08M	M4 x .7 x 5 Setscrew
17	P1806017	Flexible Shaft Cover
18	P1806018	Spring
19	P1806019	06 Ball
20	P1806020	Handle Shaft
21	P1806021	Handle Nut
22	P1806022	Handle Shaft Nut
23	P608ZZ	Ball Bearing
24	P1806024	Handle Shaft Cover
25	P1806025	Jacobs Chuck (w/4mm Key)

# IX. MACHINE DATA

## GRIZZLY MODEL G1806 FLEXIBLE SHAFT GRINDER

Design Type ..... Portable

### Capacities:

Cord Length From Motor ..... 6'

Cord Length From Foot Pedal ..... 6'

Flexible Shaft Length ..... 3'

Chuck Type ..... Key (Included)

Chuck Capacity ..... 0<sup>-5</sup>/<sub>32</sub>" (0-4mm)

### Motor

Horsepower ..... 1/4HP

Phase Type/Voltage ..... Single Phase/110V

Hertz and RPM ..... 50-60 Hertz/0-18,000RPM

Motor Type ..... Universal With Replacement Brushes

Switch ..... On/Off Toggle

Bearings ..... Shielded & Permanently Lubricated

*Specifications, while accurate, are not guaranteed.*

# **X. WARRANTY AND RETURNS**

## **Limited Warranty**

Grizzly Imports, Inc. (Grizzly) warrants every product it sells for a period of 90 days on all parts and one year on all electric motors to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

To take advantage of this warranty, the product or part must be returned to either our Bellingham or Williamsport warehouse, freight prepaid. Proof of purchase must accompany the merchandise. The manufacturers reserve the right to change specifications at any time as they constantly strive to achieve better quality equipment.

We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.